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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/819,286      | 03/28/2001  | Srinivas Gutta       | US 010097           | 6878             |

24737 7590 06/27/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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| EXAMINER |
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LAYE, JADE O

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| ART UNIT | PAPER NUMBER |
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2617

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/819,286             | GUTTA ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Jade O. Laye           | 2614                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20 and 24-26 is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 21-23 & 27-40 is/are rejected.
- 7) ☒ Claim(s) 5-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

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### *Response to Arguments*

1. Applicant has provided corrected drawing sheets. Therefore, the objection applied in the previous non-final action has been withdrawn.

2. Applicant's arguments in relation to claims 1-4, 9, 21-23, 27, 28, and 34, filed March 28<sup>th</sup>, 2005 have been fully considered but are not persuasive.

Applicant argues there is no "...indication in the portions of the reference cited by the Examiner that the negative examples are only selected upon recognition of and responsive to the positive examples." (Page 21 of Applicant's Remarks). The Examiner finds this argument unpersuasive because the argued limitation is inherently disclosed. *Gutta, US Pat. No. 6,727,914*, discloses a training system which utilizes positive examples (i.e., watched shows) and corresponding negative examples (i.e., not watched shows). (Col. 3, Ln. 27-52). In order for the system to determine which shows are "not watched," the system must first ascertain which shows "are watched." Therefore, the negative examples are selected "upon recognition of and responsive to" the positive examples.

Applicant also argues the Examiner's application of the *Gutta* reference is prohibited under 35 U.S.C. 102(e). Applicant goes on to state "[t]he sole inventor listed in the reference is also an inventor in the present application. This places the burden of proof on the Examiner to show that this is a reference, not upon the Applicants to prove that it is not a reference." (Page

21, Applicant's Remarks). The Examiner finds this argument to be unpersuasive because it is an incorrect statement of examining procedure.

Since Applicant's argument suggests a fundamental misunderstanding to 102(e) and its burden of proof, the Examiner will provide a simpler explanation. As the Applicant pointed out, the *Gutta* reference has a common inventor with the instant application. Therefore, based upon the earlier effective U.S. filing date of the *Gutta* reference, it constitutes prior art under 35 U.S.C. 102(e). However, Applicant might overcome this rejection either by:

- (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," *or*
- (2) by an appropriate showing under 37 CFR 1.131. See *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991).

Both options (1) and (2) require action on the part of the Applicant, not the Examiner. Therefore, it is Applicant's burden to rebut the Examiner's *prima facie* case against the application of the *Gutta* reference. Moreover, since Applicant provided no showing under 1.131 or 1.132, **THE PRESENT REJECTION IS BEING MADE FINAL.**

Lastly, Applicant argues the *Gutta* reference fails to teach the limitations of claim 21. Applicant states, "the reference fails to teach or suggest that no negative example appears twice and that the Examiner's conclusions to the contrary constitute impermissible hindsight in light of Applicant's disclosure." (Page 21, Applicant's Remarks). The Examiner finds this argument unpersuasive. As argued in the previous non-final action, *Gutta* teaches his system is capable of storing negative examples based upon the time of day. If a given program (that is not watched or i.e., negative example) is only shown once over a given time period selected as a training feature,

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this program would not appear twice. (Page 5 of Examiner's NFR). The Examiner does not apply impermissible hindsight, rather the Examiner only reads *Gutta* as broadly as reasonably possible. Therefore, the *Gutta* reference does encompass the limitation recited in claim 21.

3. Applicant's arguments, filed March 28<sup>th</sup>, 2005, with respect to claims 5-8, 10-20, and 24-26 have been fully considered and are persuasive. Accordingly, the previous grounds of rejection have been withdrawn.

As applied to dependent claim 5 and independent claims 10, 16, and 24, the art of record fails to teach or suggest the limitations recited therein. More specifically, *Gutta* fails to teach or suggest "...a set of positive examples including at least one subset, each subset including a respective plurality of members sharing a same respective value...".

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 29-33 and 35-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 29 and 35 recite the phrase "...which particular value appears to characterize a significant subset...". The term "appears" is indefinite and does not particularly point out and distinctly claim the subject matter which applicant regards as the invention. All claims which depend from or incorporate dependent claims 29 and 35 are also rejected.

***Claim Rejections - 35 USC § 102***

*For the applicable section of 35 U.S.C. 102, please refer to the previous non-final rejection.*

5. Claims 1, 3, 4, 9, 21-23, 27, 28, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Gutta. (US #6,727,914).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

As to claim 1, Gutta discloses a training system containing a processor and memory device, which utilizes positive examples (i.e., watched shows) and corresponding negative examples (i.e., not watched shows). (Col. 1, Ln. 1-34 & Col. 3, Ln. 27-52). Accordingly, each and every limitation of claim 1 has been anticipated by Gutta.

Claims 27, 28, and 34 correspond to claim 1. Thus, each is analyzed and rejected as previously discussed.

As to claim 3, Gutta teaches his system can be content recommender. (Col. 2, Ln. 1-34). Thus, each and every limitation of claim 3 has been anticipated by Gutta.

Claim 22 corresponds to Claim 3. Accordingly, it is analyzed and rejected as previously discussed.

As to claim 4, Gutta teaches his system can be used in conjunction with television programming. (Col. 2, Ln. 1-34). Thus, each and every limitation of claim 4 has been anticipated by Gutta.

Claim 23 corresponds to claim 4. Accordingly, it is analyzed and rejected as previously discussed.

As to claim 9, Gutta's system is a content recommender utilizing a decision tree-learning algorithm (i.e., artificial intelligence application), which recommends viewing content (i.e., useful application) via an analysis of positive and negative examples. (Col. 2, Ln. 1-34). Accordingly, each and every limitation of claim 9 has been anticipated by Gutta.

As to claim 21, Gutta teaches his system is capable of storing negative examples based upon the time of day. If a given program (that's not watched or i.e., negative example) is only shown once over a given time period selected as a training feature, this program could never appear twice. Accordingly, each and every limitation of claim 21 is anticipated by Gutta.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gutta in view of Alexander et al. (US #6,177,931).

Applicant's claim 2 recites the processing apparatus of claim 1, wherein the set of negative examples has a same number of members as the set of positive examples. As discussed above, Gutta contains all limitations of claim 1, but fails to specifically specify whether the

system analyzes exact numbers in each set. However, within the same field of endeavor, Alexander discloses a system, which records the viewer's actions, such as changing channels. The system records information on the first channel and the changed-to-channel. (Col. 28, Ln. 30-52). In essence, the first channel is a not watched channel, or negative example, while the changed-to-channel is a watched channel, or positive example. In many instances, the first and changed-to-channels represent a one-to-one ratio, or in other words, the system would store one first channel, which corresponds to one changed-to-channel. In this instance, the system would store the same number of negative and positive examples, thus encompassing claim 2. Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the content recommender of Gutta with the system of Alexander et al in order to provide an alternative learning algorithm.

(note: in the alternative, having an exact number of positive and negative examples would have been an obvious variant to the combined Gutta/Alexander et al system. Since the combined system stores corresponding examples, it is likely that in some instances, the numbers of examples would be the same.)

#### *Allowable Subject Matter*

7. Claims 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



8. Claims 10-20 and 24-26 are in a condition for allowance based upon the reasons mentioned above in Paragraph 3.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Whiteis (US Pat. No. 5,749,081) discloses a system and method for recommending items to users.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (571) 272-7303. The examiner can normally be reached on Mon. 7:30am-4, Tues. 7:30-2, W-Fri. 7:30-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner's Initials JI  
June 14, 2005.

  
NGOC-YEN VU  
PRIMARY EXAMINER